

REFERENCE COPY

APOLLO PROGRAM DIRECTIVE NO. 36
MA 009-036-1A

TO : DISTRIBUTION

FROM:


DIRECTOR, APOLLO PROGRAM

SUBJECT: Apollo Program Equipment Cannibalization Control

I. PURPOSE

The practice of removing components from one end item for installation on another end item to meet priority requirements is commonly called "cannibalization." Because of the hurried circumstances under which this practice often takes place, it carries an inherent danger of lack of control over the cannibalized end item.

This directive established policy guidance and identifies the responsibilities for control of cannibalization.

For the purposes of this directive Controlled Cannibalization is defined as: "The authorized removal of a specific part or component from one end item for installation on another end item to meet priority requirements, including the obligation of recording the removal; replacing the specific cannibalized part or component, and accomplishing those tests necessary to demonstrate that the cannibalized end item has been restored to its original acceptance status.

NOTE - Cannibalization under any condition is undesirable and should be resorted to only in those cases of extreme urgency when inability to obtain the required part through normal supply channels would adversely affect test schedules or mission requirements.

II. SCOPE and APPLICABILITY

The provisions of this directive shall be applied to all Apollo Program vehicle and ground support equipment including mission support real property equipment.

This directive applies to those NASA Centers and their contractors having Apollo equipment support responsibilities at the test or launch sites.

III. ACTIONS REQUIRED

- A. Each Center will develop and implement an internal cannibalization control program that will assure that:
 - 1. Every effort has been made to obtain the needed items through the normal supply or repair channels.
 - 2. Positive controls are in effect to prevent unapproved cannibalization.
 - 3. All information and records are accurate and that a control number is obtained from the central authority and assigned to each approved cannibalization action.
 - 4. Closed loop reporting of each cannibalization recommendation is available when required for assessment, review, or audit purposes.
- B. A sample approval form is attached as Exhibit "A" to assist the Centers in developing a more uniform control system.

IV. RESPONSIBILITIES

- A. The NASA Apollo Program Control Office (Logistics Management) shall be responsible for the implementation of the requirements of this directive.
- B. The Center Apollo (or Saturn) Program Manager is responsible for:
 - 1. Establishing the Center's controlled cannibalization procedures as it applies to the Center's Apollo Program equipment activities.
 - 2. Reviewing and approving all procedures developed at directorate (line) level for controlled cannibalization with the view of standardizing these procedures insofar as practicable.
 - 3. Periodically assessing the effectiveness of the controlled cannibalization program.
- C. Each Center or Center-delegated Government agency responsible for executing an Apollo equipment cannibalization action is responsible for having a documented control procedure to the contractor level. These procedures must provide complete visibility of all actions necessary for assuring the replacement of removed parts or components with identical, serviceable parts/components and such verification tests as are required.

- D. Approvals of cannibalization actions must be made at a sufficiently high management level to assure positive control over equipment and schedule integrity. Cannibalization actions impacting major milestone schedules of follow-on vehicle or GSE processing should be referred to the Program Manager for approval.

V. APPROVAL CRITERIA FOR CANNIBALIZATION

- A. All of the following conditions must be present before cannibalization is approved:

1. A serviceable replacement part cannot be obtained through the supply channels.
2. The failed part cannot be locally repaired and tested in time to meet schedule requirements.
3. The equipment from which the failed part is being removed is urgently needed for use to meet a schedule milestone.
4. A completely serviceable part, identical in form, fit and function to the failed part, can be readily removed from another unit of equipment having a lesser priority for meeting scheduled milestones.

NOTE - Serviceability of the cannibalized part must be certified through satisfactory performance in the system or subsystem from which it is being removed or through bench tests when resources for such certification are available. Waiver of this test requirement to be made at the management level specified in paragraph IV.

VI. SCHEDULE

The requirements of this directive are effective immediately. Applicable Apollo directives and contracts are to be amended as required to satisfy the intent of this directive within 60 days of release.

VII. RESOURCES

Funding and resources for accomplishment intent of this directive will be made from the current Apollo Program (existing) allocations.

CANNIBALIZATION RECORD

CONTROL NO. _____

DATE _____

REQUESTING ORGANIZATION

EQUIPMENT CLASS	LVGSE <input type="checkbox"/>	ELSE <input type="checkbox"/>	ENGINE	SYSTEM REJECTION NO.	MCR/W/O/PROC.
STAGE <input type="checkbox"/>	STAGE GSE <input type="checkbox"/>	LSE <input type="checkbox"/>	LVIS <input type="checkbox"/>	ENGINE GSE <input type="checkbox"/>	
SYSTEM REQUIRING PART.					
REQUESTED PART NUMBER	NOMENCLATURE		QTY	S/N OF FAILED ITEM	
USED-ON (PRESENT LOCATION)	NOMENCLATURE		EFF.	S/N OF USED-ON	
REQUESTING ORGANIZATION	REQUESTED BY		ORG. NO.	M. S.	
IMPACT			SIGNATURE*		EXT.

RELINQUISHING ORGANIZATION

SYSTEM WITH INSTALLED PART	PART NUMBER	NOMENCLATURE	QTY	S/N
R/R INITIATED DATE	DATE ITEM REMOVED	DATE TO PRODUCTION CONTROL	DATE REPLACEMENT REQUIRED	
SYSTEM NCP NO.	REPLACEMENT WILL SATISFY, NCR/W/O/PROC.		EFF.	
REMOVAL IMPACT			SIGNATURE**	
			EXT.	
RELINQUISHING ORGANIZATION NO.	APPROVED BY		MAIL STOP	EXT.
ACCEPTANCE TESTING STATUS		CERTIFIED BY	RETESTING REQUIRED	CERTIFIED BY

REPLACEMENT STATUS

RESP. PROVISIONING SOURCE	PR. NUMBER	PO. NUMBER	QTY	EOD	REMARKS
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APPROVAL

L.O. ENGINEERING SUPERVISOR	EXT.	SUPPORT OPERATIONS SUPERVISOR	EXT.
QUALITY CONTROL SUPERVISOR	EXT.	PRODUCTION CONTROL SUPERVISOR	EXT.

NASA APPROVAL (ONLY IF REMOVAL WILL INVALIDATE NASA ACCEPTANCE OF SYSTEM)

*Authorize in writing to request cannibalization

**Authorized in writing to approve cannibalization

EXHIBIT "A"